

Title (en)  
NOVEL NUCLEIC ACID MOLECULE

Title (de)  
NEUES NUKLEINSÄUREMOLEKÜL

Title (fr)  
NOUVELLE MOLÉCULE D'ACIDE NUCLÉIQUE

Publication  
**EP 4306641 A1 20240117 (EN)**

Application  
**EP 22750088 A 20220207**

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Abstract (en)  
The present invention relates to a nucleic acid molecule for preventing or treating viral infection or cancer, comprising a nucleic acid encoding a signal peptide and a nucleic acid encoding an antigen. Furthermore, it relates to a vaccine composition for preventing or treating viral infection or cancer, comprising the nucleic acid molecule. The nucleic acid molecule according to the present invention has excellent intracellular protein expression rate and protein secretion ability to the outside of the cell. In addition, when administered in vivo, it allows the subject to acquire humoral immunity, such as inducing antigen-specific neutralizing antibodies, and cellular immunity, such as increasing the amount of immune cells directly involved in killing the virus. Thus, it can be useful as a vaccine for the prevention and treatment of viral infection or cancer.

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